NASA'S MISSION TO PLANET EARTH
EARTH PROBES
DATA INFORMATION SYSTEM
EOS
EARTH OBSERVING SYSTEM

SDPS Release Plan
Steve Fox
System Design Review - 29 June 1994

Release Plan Overview

IR-1	A	B	C	D
12/95	12/96	9/97	12/99	10/01

EP Deliveries

PGS TKs   PGS TK Sustaining Engineering
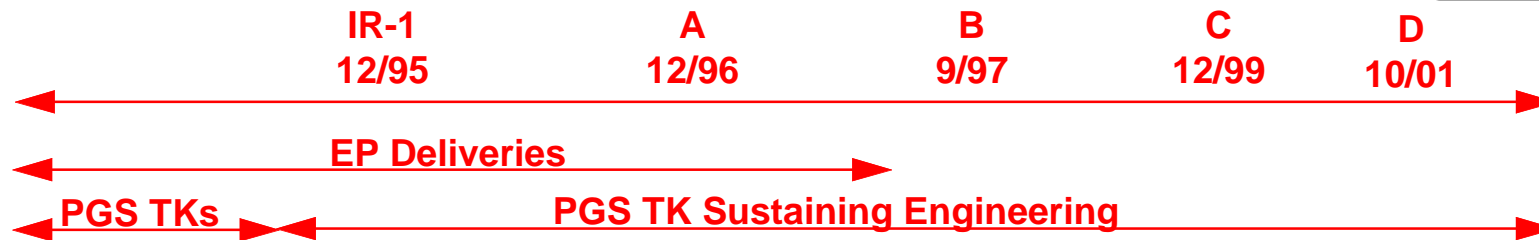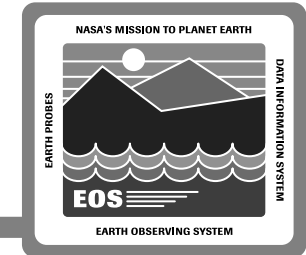
Criteria for Capability Phasing

- Support mission critical requirements for each release
- Develop infrastructure as early as possible
- Remaining capabilities influenced by COTS availability/dev schedules

Early Component Deliveries

- PGS Toolkit - enable science software teams to design/develop prior to ECS release
- Evaluation Packages (EPs)
  - Obtain user feedback on planned capabilities & refine requirements
  - 4 EP deliveries to DAACs during Release A/B development
  - Phasing of capabilities to be determined jointly by ECS, ESDIS, and users

SDPS Release IR-1 Capabilities

SDPF and TSDIS interface testing

Generation of production plan with manual submission of processing requests

TRMM Version 1, AM-1 Beta/Version 1 Science S/W support
Algorithm Development Libraries (PGS Toolkit)*
Basic tools / scripts for I&T
Production plan execution on single platform
Automatic (non-predictive) staging
GUI for View, Monitor and Control

*denotes early component delivery

SDPS Release A Capabilities
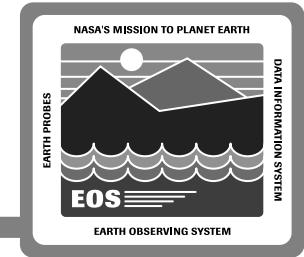
EDOS interface testing
Landsat-7 interface testing
TRMM and selected V0 Data
Ingest preparation toolkit

Automatic submission of processing requests
Limited replanning support for reprocessing & on-demand
  processing

Tools / Scripts for I&T, QA, and Ancillary data preprocessing
Production plan execution across multiple platforms

Basic desktop functions*
Basic scientist workbench functions*
Visualization tools*

*denotes early component delivery

SDPS Release A Capabilities (cont)
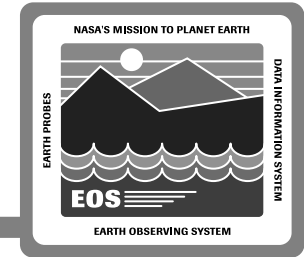
Basic advertising services with text search and hyperlink capabilities *

Basic LIM functions for cross Data Server queries*
Spatial/Temporal coincident searches within a site*
Basic data dictionary functions*

Basic archive, distribution, and access functions for TRMM and selected V0 data
Metadata search/update functions*
Hypertext, attribute, temporal, spatial (MBR, point-radius) searches*
Two-way interoperabililty with V0*
One-way interoperability with NOAA and CIESIN*
Local data access services*

*denotes early component delivery

SDPS Release B Capabilities
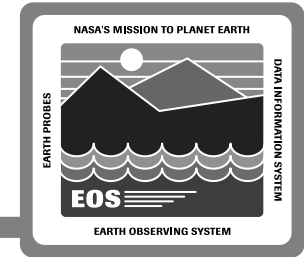
EDOS and remaining V0 Data
Landsat-7, COLOR, ADEOS II Data

Generation of production plans with complex strategies
Cross site planning functions

Additional I&T, QA, and Ancillary data tools
Enhanced queuing and staging across multiple platforms

Enhanced desktop functions*
Additional scientist workbench functions*
DAR Planning tools*

*denotes early component delivery

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SDPS Release B Capabilities (cont)
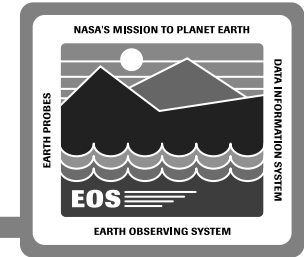
*Enhanced advertising services**
ECS Service Provider interface APIs

*Basic DIM functions for cross site queries**
*Enhanced LIM functions for cross Data Server queries**
*Enhanced Data Dictionary functions**

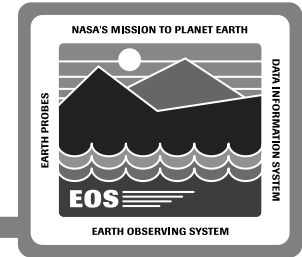**Archive, distribution, and access functions for AM-1, COLOR, Landsat-7, and V0 data**
*Spatial queries with polygon searches**
Data subsetting
Ability to incorporate user defined methods

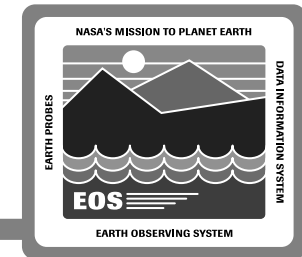*denotes early component delivery

SDPS Release C/D Capabilities

Two-way interoperability with NOAA and CIESIN

Enhanced DIM capabilities

Support for additional missions

Evolutionary enhancements

SDPS Subsystem KLOC* By Release

Subsystem	IR-1	Release A	Release B	Release C/D	Totals
Client	0	27	17	7	51
Data Mgmt	0	10	17	22	49
Data Server	2	75	70	16	163
Ingest	7	8	5	2	22
Interoperability	0	5	2	1	8
Planning	10	17	14	0	41
Processing	50	26	26	17	119
Totals:	69	168	151	65	
				SDPS Total =	453

*Developed lines of code x1000

Collaboration Needed for PDR

Architecture Working Group (ongoing)

- **Work through SDR issues**

- **Review/feedback on preliminary design**

Reconcile metadata baseline with producers/consumers (10/94)

Refine system model (ongoing)

Define product resource requirements for AM baseline (9/94)

Clarify user/data policy for Release A/B timeframe (10/94)